

Attorney's Docket No. RA-5425  
Amendment

Serial No. 10/028,152

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**Claim 1:**

(Currently Amended) 1. A method of operating a Visual Basic program comprising; capturing data from an ~~Excel~~EXCEL® spreadsheet program data file, wherein said data is organized by lines, and wherein a set of lines contains all information needed for producing a single signal line or a header/format line, and wherein there is a multiplicity of sets of lines in a said ~~Excel~~EXCEL® spreadsheet program data file, said capturing including,

for each set of lines of said data file information unique to a particular signal line intended to be displayed, capturing, from said ~~Excel~~EXCEL® spreadsheet program data file by communication of a ~~Visual Basic~~VISUAL BASIC® procedure within said ~~Visual Basic~~VISUAL BASIC® program with said ~~Excel~~EXCEL® spreadsheet program, said data file information,

interpreting in said ~~Visual Basic~~VISUAL BASIC® procedure said data file information from said set of lines in accord with a command from within said set of lines,

preparing said data file information in accord with said command in said ~~Visual Basic~~VISUAL BASIC® procedure to instruct an instance of a ~~Visio~~VISIO® program to draw a signal line or a header/format line in accord with said command from within said set of lines,

operating an instance of a ~~Visio~~VISIO® program to provide a display file containing each said particular signal line and header/format line in accord with said captured data interpreted through said command from within said set of lines pertaining to each said signal line or header/format line by

sending to said instance of Visio a command and data parameters corresponding with each said set of lines together with said command for each said set of lines so that said instance of ~~Visio~~VISIO® can produce a .vsd file containing sufficient information for ~~Visio~~VISIO® to print or display a timing chart having each signal line and header/format line incorporated therein.

**Claim 2:**

(Currently Amended) 2. The method of Claim 1 wherein said sets of lines of said data file are read in order from one end of the data file to the opposite end of said

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data file and pre.

**Claim 3:**

(Currently Amended) 3. The method of Claim 2 wherein the one end is a top and the opposite end is a bottom as said data file may be displayed by using ~~Excel~~EXCEL®.

**Claim 4:**

(Currently Amended) 4. A method of operating a control program for drawing a timing chart from a spreadsheet data file accessible through an independently operable spreadsheet program employing an independently operable drawing program comprising, upon initiation of said control program;

said control program captures data from said spreadsheet data file,  
said control program sends commands based on said captured data to said drawing program, wherein said captured data contains commands for each line of a timing chart,  
said control program interprets said commands for identifying drawing actions to be accomplished by said drawing program and wherein said control program commands said drawing program in conformity with said commands.

**Claim 5:**

(Currently Amended) 5. The method of Claim 4 further comprising;  
said step of capturing data from said spreadsheet file is executed by requesting each line of data from said spreadsheet file ~~from a~~ via said independently operable spreadsheet program which is actively running.

**Claim 6:**

(Currently Amended) 6. The method of Claim 4 further comprising;

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in said step of said control program commanding said drawing program in conformity with said commands, said drawing program produces a display modified by ~~substantially each~~ commands.

**Claim 7:**

(Currently Amended) 7. The method of Claim 5 wherein a user initiates use of said control program and supplies the spreadsheet data file name to said control program to enable said control program to access said spreadsheet data via said file name from said independently operable spreadsheet program.

**Claim 8:**

(Currently Amended) 8. The method of Claim 7 wherein a user prior to initiating use of said control program populates said spreadsheet data file having said spreadsheet data file name with timing chart data using said independently operable spreadsheet program, independently from said control program.

**Claim 9:**

(Currently Amended) 9. The method of Claim 7 wherein said step of populating said spreadsheet data file having said spreadsheet data file name is accomplished in part using a graphic user interface operating on said independently operable spreadsheet program.

**Claim 10:**

(Currently Amended) 10. An apparatus for drawing a timing chart based upon data and commands in a spreadsheet data file comprising:

a software program containing a procedure for capturing data and commands from said spreadsheet data file, using an independently operable spreadsheet program to access said spreadsheet data file, said software program including a set of subroutines for interpreting said commands and a subroutine for sending said interpreted commands to an independently

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operable drawing program together with any associated datums within said data file.

**Claim 11:**

(Currently Amended) 11. An apparatus as set forth in Claim 10 wherein said software program is written in ~~Visual Basic~~ VISUAL BASIC®.

**Claim 12:**

(Currently Amended) 12. An apparatus as set forth in Claim 11 wherein said ~~Visual Basic~~ VISUAL BASIC® program subroutine for capturing said data and commands from said spreadsheet data file comprises a routine for requesting a row of data from a said independently operable spreadsheet program.

**Claim 13:**

(Currently Amended) 13. An apparatus as set forth in Claim 12 wherein said routine for requesting a row of data from via said independently operable spreadsheet program to obtain said row of data from said spreadsheet data file contains a command that can be submitted to and is interpretable by ~~Excel~~ EXCEL®.

**Claim 14:**

(Currently Amended) 14. An apparatus as set forth in Claim 12 wherein said subroutine for sending said interpreted commands to a drawing program together with any associated datums within said data contains a command interpretable by ~~Visio~~ VISIO®.

**Claim 15:**

(Currently Amended) 15. An apparatus as set forth in Claim 10 wherein said subroutine for sending said interpreted commands to a drawing program together with any associated datums within said data contains a command interpretable by ~~Visio~~ VISIO®.

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**Claim 16:**

(Original) 16. An apparatus as set forth in Claim 10 wherein said apparatus comprises electronic signals within a computer memory.

**Claim 17:**

(Original) 17. An apparatus as set forth in Claim 16 wherein said computer memory is a transportable disk.